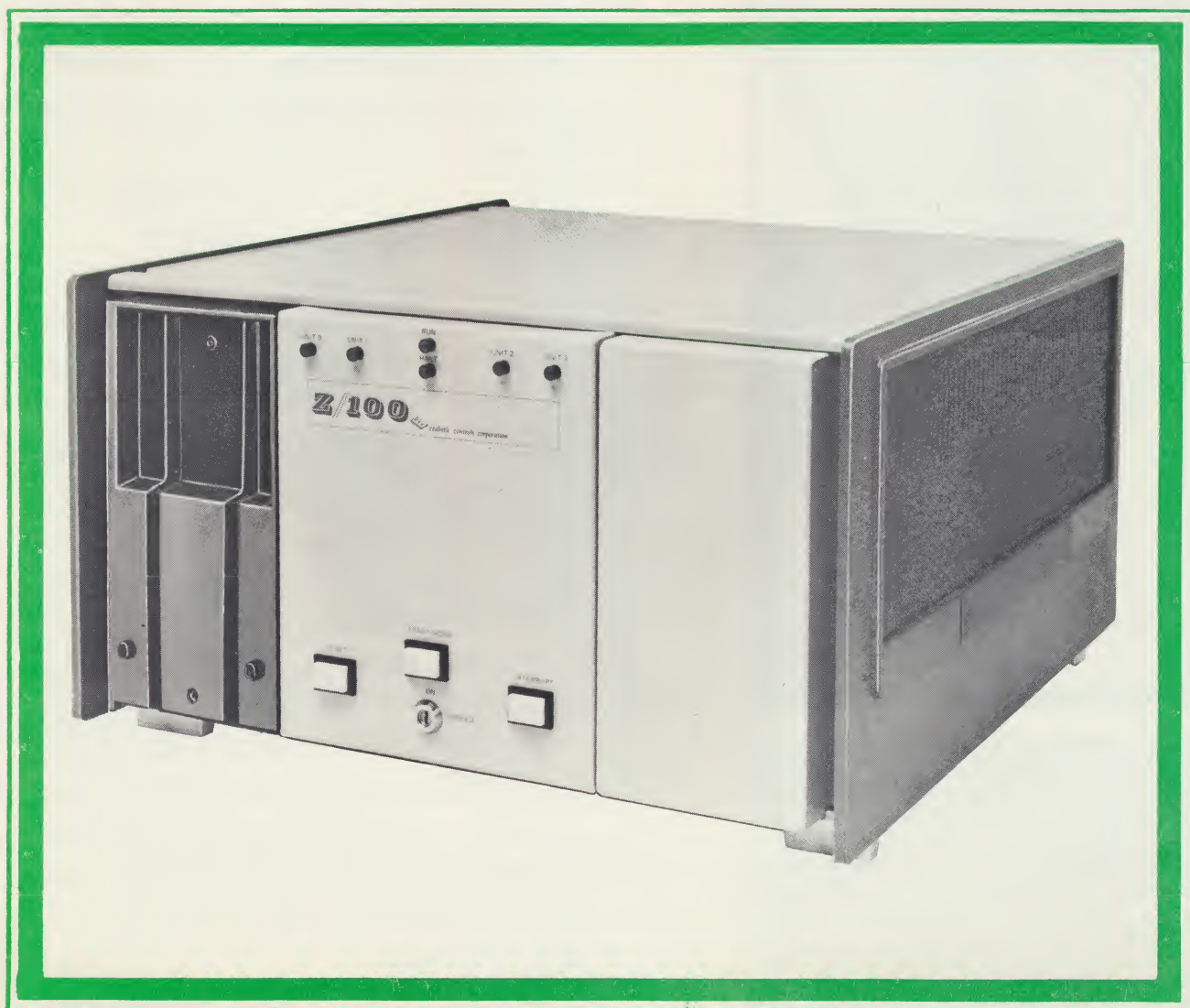


realistic controls corporation

Z//100-1

**PORTABLE
MICROCOMPUTER
SYSTEM**



The Realistic Controls Z//100-1 is a portable desktop computer system designed for small business and industrial development system applications. Incorporating a state-of-the-art 8080 microprocessor, up to a million characters of on-line floppy disk storage, up to 64K bytes of Random Access (RAM) memory, a Floppy Disk Operating System, On-line Text Editor, and optional resident FORTRAN IV compiler, the Z//100-1 is an exceptionally effective timesharing replacement system.

JUST PLUG IT IN

The Z//100-1 is designed so that you can merely unplug your present FORTRAN language timesharing terminal from the acoustic coupler, plug it in to the Z//100-1, and have your own "Personal FORTRAN Machine" ready for data processing or 8080 program development using high level languages.

HIGH LEVEL LANGUAGE

The FORT//80 resident FORTRAN IV compiler is fast and efficient. It accepts FORTRAN source statements and translates them into an optimized sequence of 8080 machine language instructions which can be directly executed by the Z//100-1 or loaded into PROM/RAM for industrial applications. FORT//80 is a subset of ANSI standard FORTRAN IV with powerful extensions which allow the hardware manipulations which can be so important in a microcomputer. Extensions like: direct I/O to 8080 ports; embedded in-line machine code capabilities; and FORTRAN control over interrupts and interrupt service routines.

RCC Monitor

Provides system executive functions to manage the Z//100-1 hardware/software environment. Includes commands such as MOVE, DISPLAY, FILL and TRACE which allows the user to debug his program in real-time with single instruction stepping and direct control over memory, program instructions, and data.

Floppy Disk Operating System/File Management

Allows simple user commands to call all system programs, including macro-assembler, editor, file utilities, BASIC, and FORTRAN, as well as user programs. The file management systems stores, organizes and retrieves information efficiently. It maintains all



FORTAN IV

A powerful subset of ANSI standard FORTRAN IV, featuring

- One and two byte integer and IBM compatible single and double precision floating point signed arithmetic
- Optimized object code
- Library of subroutines and functions
- Control over run-time placement of program code and data variables
- FORTRAN control over interrupts and interrupt service routines

FEATURES

directories and indices and allocates file space for the user. Named files of varying lengths can be created, modified, and moved easily and efficiently.

Macro-assembler

Converts sequences of symbolic language instructions into directly executable object code.

BASIC

A popular high level programming language employing only a few powerful commands to solve a wide range of both simple and complex problems with a minimum of programming expertise.



- Direct I/O to 8080 ports
- Direct interface of custom I/O drivers to FORTRAN Read and Write statements
- Embedded in-line machine code accepted
- 8080 condition bits available as FORTRAN keywords
- Multiple assignment operators per FORTRAN statement accepted
- Parameters called by name or value
- Self-documenting - Up to 31 character symbolic names permitted
- Constants expressed in base 2, 8, 10, or 16
- Program listings with optionally interleaved object code

HARDWARE FEATURES

Standard Hardware

Attractive desk-top cabinet houses CPU, 32K of Random Access Memory (RAM), 3K of Programmable Read-Only Memory (PROM), a half-million character Dual Floppy Disk Drive, Serial Communications Channel (EIA or current loop), and Power Supply.

Dual Diskette Drive

The IBM compatible Dual Diskette Drive includes two flexible diskettes in a single compact drive. In addition, the cabinet includes space for mounting an optional second dual drive for UP TO ONE MILLION CHARACTERS OF ON-LINE STORAGE! The drives feature voice coil positioning for highly accurate, high speed head positioning, plus automatic diskette loading and unloading to reduce possibilities for media handling damage.

Serial Communications Channel

Interfaces with a customer supplied EIA or current loop serial CRT or hardcopy terminal (such as ASR-33, KSR-33, DECwriter LA-36, or TTY compatible CRT). A second serial communications channel is available as an option (EIA only).

Expansion Memory

16K RAM Memory modules are available to expand the system to 48K or 64K of RAM memory.

SPECIFICATIONS

PROCESSOR

CPU 8080A microprocessor
Memory PROM - 3K bytes standard
RAM - 32K bytes, standard; expandable
to 48K or 64K bytes

COMMUNICATIONS

Serial Communications Channel .. Current Loop or EIA
RS-232C, standard
Second EIA only channel, optional

Speed Customer must specify one of the following
baud rates at the time of order:

75	1200
110	2400
150	4800
300	9600
600	19200

DUAL DISKETTE DRIVE

Format IBM 3740 compatible, single density
Drives per system 1 standard, 1 optional
Diskettes per drive 2
Media IBM 3740 compatible removable
flexible diskette
Capacity per drive: 3.8 Mbits/486 Kbytes
per diskette: 1.9 Mbits/243 Kbytes
per track: 26.6 Kbits/3.3 Kbytes
per sector: 1024 bits/128 bytes
Access Times track to track (including settle
time): 10 msec
average random seek: 33msec
Positioning mechanism linear voice coil motor

SOFTWARE AVAILABLE

8080 machine language standard
RCC Monitor standard
Floppy Disk Operating System/File
Management (Includes: Macro-assembler,
text editor, file utilities) .. optional (supplied as Intel*
DOS-32 diskette)
BASIC Compiler optional
FORTRAN IV Compiler optional

PHYSICAL SPECIFICATIONS

Power 100-130 Vac; 40-440 Hz; 180 VA, max

Dimensions

height 10.25 in (260 mm)
width 18.50 in (470 mm)
depth 20 in (508 mm)

Weight

with one dual diskette drive 37 lbs (17 kg)
with two dual drives 56 lbs (25 kg)

Environment

operating temperature... 50 to 100 °F (10 to 38 °C)
storage temperature .. -40 to +160 °F (-40 to 71 °C)
operating relative humidity 8 to 80%, non-condensing
storage relative humidity... 0 to 95%, non-condensing

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■ *Realistic Controls Corporation — innovative
information and control systems for business
and industry.*



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